Amendments to the Claims:

Please amend claims 26, 30, 34, 38, 42, 43, 44 and 45 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Cancelled).

Claim 2 (Previously Presented). A data structure of an image file according to claim 42, wherein the stereo data contains identification information indicating whether or not the image file is a stereo image file, information used to reproduce the respective monocular images from all the pieces of image information, and information associated with a layout of the monocular images.

Claim 3 (Previously Presented). A data structure of an image file according to claim 42, wherein the stereo data is described in a header field of the image file.

Claim 4 (Cancelled).

Claim 5 (Previously Presented). A data structure of an image file according to claim 42, wherein the monocular images include two, right and left images corresponding to binocular view of right and left eyes, and the parallel layout type stereo image data is a stereo image pair (SPM) in which the right and left images are arranged at one of right and left positions and the other of the right and left positions.

Claim 6 (Cancelled).

Claim 7 (Previously Presented). A recording medium that stores a digital stereo image file having a data structure cited in claim 42 so as to be readable by a machine.

Claim 8 (Cancelled).

Claim 9 (Previously Presented). A generation method of an image file according to claim 43, wherein the stereo data contains identification information indicating whether or not the image file is a stereo image file, information used to reproduce

the respective monocular images from all the pieces of image information, and information associated with a layout of the monocular images.

Claim 10 (Previously Presented). A generation method of an image file according to claim 43, wherein the stereo data is described in a header field of the image file.

Claim 11 (Cancelled).

Claim 12 (Previously Presented). A generation method of an image file according to claim 43, wherein the monocular images include two, right and left images corresponding to binocular view of right and left eyes, and the parallel layout type stereo image data is a stereo image pair (SPM) in which the right and left images are arranged at one of right and left positions and the other of the right and left position.

Claim 13 (Cancelled).

Claim 14 (Cancelled).

Claim 15 (Previously Presented). A generation apparatus for an image file according to claim 44, wherein the stereo data contains identification information indicating whether or not the image file is a stereo image file, information used to reproduce the respective monocular images from all the pieces of image information, and information associated with a layout of the monocular images.

Claim 16 (Previously Presented). A generation apparatus for an image file according to claim 44, wherein the stereo data is described in a header field of the image file.

Claim 17 (Cancelled).

Claim 18 (Previously Presented). A generation apparatus for an image file according to claim 44, wherein the monocular images include two, right and left images corresponding to binocular view of right and left eyes, and the parallel layout type stereo image data is a stereo image pair (SPM) in which the right and left images are arranged at one of right and left positions and the other of the right and left positions.

Claim 19 (Cancelled).

Claim 20 (Cancelled).

Claim 21 (Previously Presented). An imaging apparatus according to claim 45, wherein the trimming process executed by said imaging frame setting means is done at identical vertical and horizontal trimming ratios with reference to 100% trimming as a trimming state when the plurality of monocular image frames occupy a maximum region.

Claim 22 (Previously Presented). An imaging apparatus according to claim 45, wherein said stereo imaging optical system is prepared by attaching, before a single lens imaging optical system, a stereo adapter as an optical system for splitting a single field of view of the imaging optical system into a plurality of fields of view having predetermined parallax.

Claim 23 (Previously Presented). An imaging apparatus according to claim 45, wherein said stereo imaging optical system is a binocular type stereo optical system having a pair of right and left optical axes.

Claim 24 (Cancelled).

Claim 25 (Previously Presented). An image generation apparatus according to claim 45, wherein the plurality of monocular images are input from independent image files.

Claim 26 (Currently Amended). A recording medium which machine readably stores a single image file having a data structure, which comprises:

one image data which generates a single stereo image by first and second monocular images formed via first and second optical axes having a span substantially corresponding to parallax; and

header information which contains an item indicating that the first and second monocular images are contained in said image data, an item indicating that the first and second monocular images belong to a single stereo image, and an item associated with addresses of the first and second monocular images, and is inseparable from the image data,

wherein the image data is obtained by forming predetermined frame line regions <u>on boundary regions</u> of the first and second monocular images <u>which correspond to outer frames wherein the</u>

first and second monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the single stereo image to visually identify the single stereo image.

Claim 27 (Original). A recording medium according to claim 26, wherein the first and second monocular images are two dimensional images which are arranged side by side to form a single stereo image.

Claim 28 (Original). A recording medium according to claim 26, wherein the first and second monocular images are trimmed to form a single stereo image.

Claim 29 (Original). A recording medium according to claim 26, wherein the first and second monocular images are trimmed at identical trimming ratios to form a single stereo image.

Claim 30 (Currently Amended). A method of generating three dimensional image data, comprising:

[[the]] an image data generation step of generating first and second monocular images by forming an object image via first and second optical axes substantially corresponding to parallax, and generating one image data corresponding to a single stereo image on the basis of the first and second monocular images;

[[the]] a header information generation step of generating header information which contains an item indicating that the first and second monocular images are contained in said image data, an item indicating that the first and second monocular images belong to a single stereo image, and an item associated with addresses of the first and second monocular images; and

[[the]] a recording step of recording a single image file having a data structure that contains the image data and the header information which is inseparable from the image data on a recording medium,

wherein the image data is obtained by forming predetermined frame line regions on boundary regions of the first and second monocular images which correspond to outer frames wherein the first and second monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region

or around the single stereo image to visually identify the single stereo image.

Claim 31 (Original). A method according to claim 30, wherein the first and second monocular images are two dimensional images which are arranged side by side to form a single stereo image.

Claim 32 (Original). A method according to claim 30, wherein the first and second monocular images are trimmed to form a single stereo image.

Claim 33 (Original). A method according to claim 30, wherein the first and second monocular images are trimmed at identical trimming ratios to form a single stereo image.

Claim 34 (Currently Amended). An apparatus for generating a three-dimensional image or stereograph having one file structure, and recording the three dimensional image on a recording medium, comprising:

image data generation means for generating first and second monocular images by forming an object image via first and second optical axes substantially corresponding to parallax, and

generating one image data corresponding to a single stereo image on the basis of the first and second monocular images;

header information generation means for generating header information which contains an item indicating that the first and second monocular images are contained in said image data, an item indicating that the first and second monocular images belong to a single stereo image, and an item associated with addresses of the first and second monocular images; and

recording means for recording a single image file having a data structure that contains the image data and the header information which is inseparable from the image data on a recording medium,

wherein the image data is obtained by forming predetermined frame line regions on boundary regions of the first and second monocular images which correspond to outer frames wherein the first and second monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the single stereo image to visually identify the single stereo image.

Claim 35 (Original). An apparatus according to claim 34, wherein the first and second monocular images are two-dimensional images which are arranged side by side to form a single stereo image.

Claim 36 (Original). An apparatus according to claim 34, wherein the first and second monocular images are trimmed to form a single stereo image.

Claim 37 (Original). An apparatus according to claim 34, wherein the first and second monocular images are trimmed at identical trimming ratios to form a single stereo image.

Claim 38 (Currently Amended). A stereo digital camera for generating a three dimensional image or stereograph having one file structure, and recording the three dimensional image on a recording medium, comprising:

an optical system which has right and left optical axes substantially corresponding to parallax, and forms object images;

a single pickup unit for generating one image data corresponding to a single stereo image on the basis of right and left monocular images formed thereon via said optical system;

header information generation means for generating header information which contains an item indicating that the first and second monocular images are contained in said image data, an item indicating that the first and second monocular images belong to a single stereo image, and an item associated with addresses of the first and second monocular images; and

recording means for recording a single image file having a data structure that contains the image data and the header information which is inseparable from the image data on a recording medium,

wherein the image data is obtained by forming predetermined frame line regions on boundary regions of the first and second monocular images which correspond to outer frames wherein the first and second monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the single stereo image to visually identify the single stereo image.

Claim 39 (Original). A stereo digital camera according to claim 38, wherein the first and second monocular images are two

dimensional images which are arranged side by side to form a single stereo image.

Claim 40 (Original). A stereo digital camera according to claim 38, wherein the first and second monocular images are trimmed to form a single stereo image.

Claim 41 (Original). A stereo digital camera according to claim 38, wherein the first and second monocular images are trimmed at identical trimming ratios to form a single stereo image.

Claim 42 (Currently Amended). A data structure of a multocular digital stereo image file which is formed by a plurality of monocular images of different viewpoints, and is recorded as digital data,

wherein all image data including all pieces of image information of the plurality of monocular images, and stereo data as information which pertains to a construction as a stereo image except for the image information are inseparably arranged in construction units of a single file;

wherein all the image data form parallel layout type stereo image data obtained by arranging the respective pieces of image information of the plurality of monocular images at different positional regions on one two-dimensional image; and

wherein the parallel layout type stereo image data is obtained by forming a predetermined frame line on boundary regions of the plurality of monocular images to form predetermined frame line regions which correspond to outer frames wherein the plurality of monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the stereo image to visually identify the stereo image.

Claim 43 (Currently Amended). A method of generating a multocular digital stereo image file which is formed by a plurality of monocular images of different viewpoints, and is recorded as digital data, comprising:

an image data generation step of generating all image data containing all pieces of image information of the plurality of monocular images;

a stereo data generation step of generating stereo data as information which pertains to a construction of a stereo image except for the image information; and

an image file generation step of generating a single digital image file by combining all the image data and the stereo data as the digital stereo image file,

wherein all the image data form parallel layout type stereo image data obtained by arranging the respective pieces of image information of the plurality of monocular images at different positional regions on one two-dimensional image; and

wherein the parallel layout type stereo image data is obtained by forming a predetermined frame line on boundary regions of the plurality of monocular images to form predetermined frame line regions which correspond to outer frames wherein the plurality of monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the stereo image to visually identify the stereo image.

Claim 44 (Currently Amended). An apparatus for generating a multocular digital stereo image file which is formed by a plurality of monocular images of different viewpoints, and is recorded as digital data, comprising:

image data generation means for generating all image data containing all pieces of image information of the plurality of monocular images;

stereo data generation means for generating stereo data as information which pertains to a construction of a stereo image except for the image information; and

image file generation means for generating a single digital image file by combining all the image data and the stereo data as the digital stereo image file,

wherein all the image data form parallel layout type stereo image data obtained by arranging the respective pieces of image information of the plurality of monocular images at different positional regions on one two-dimensional image; and

wherein the parallel layout type stereo image data is obtained by forming a predetermined frame line on boundary regions of the plurality of monocular images to form predetermined frame line regions which correspond to outer frames wherein the plurality of monocular images are formed such that

less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the stereo image to visually identify the stereo image.

Claim 45 (Currently Amended). An imaging apparatus comprising:

a stereo imaging optical system for receiving light rays coming from an object at different positions corresponding to parallax, and guiding the received light rays toward different regions of a pickup unit;

imaging means for obtaining an object image signal on the basis of the output from the pickup unit;

image frame setting means for setting a plurality of monocular image frames corresponding to a plurality of monocular images as building components of one multocular stereo image in an imaging area of the pickup unit by executing a predetermined trimming process of the object image signal; and

stereo image generation means for generating a multocular stereo image having a predetermined data structure on the basis of a plurality of monocular images obtained in correspondence with the plurality of monocular image frames,

wherein the multocular stereo image generated by said stereo image generation means has:

a data structure of a multocular digital stereo image file, which is formed by a plurality of monocular images of different viewpoints, and is recorded as digital data, and

in which all image data including all pieces of image information of the plurality of monocular images, and stereo data as information which pertains to a construction as a stereo image except for the image information are inseparably arranged in construction units of a single file wherein the plurality of monocular images are formed such that less than all of each of these images remains thereby eliminating a darkened or overlapping portion of the images to form a frame line having a width of one to several pixels in a boundary region or around the stereo image to visually identify the stereo image.